# B. E. TILDEN CO.

SOLE MANUFACTURERS AND OWNERS OF ALL PATENTS ON THESE

# GAR AND ELOCOMOTIVE REPLACING FROGS.

Received all the premium awards on Replacing Frogs at the World's Columbian Exposition at Chicago, Ill., in 1893.

The only strictly Reliable Invention for Re-railing any Derailed Rolling Stock.

THE TILDEN IMPROVED WRECKING FROGS
FOR ALL RAILWAYS.

CHICAGO, ILL., U. S. A. s. w cor. Jackson and Dearborn STS.

The power of gravity never admits of the wheels passing the altitude illustrated. The wheels go laterally to their place on the rails as soon as the tread on the inside wheels and the flange on the outside wheels comes up to the altitudes equal to the top of the rails as illustrated above.

SIDE WILD DE EIGHT

derailed folling stock. Several trucks of cars can be replaced by one sitting of these frogs. As the train is pulled shead and each pair of wheels reach them, they are carried up and onto the rails; with wheels badly off, that is, a considerable distance from the rails; the first sitting of the frogs slews the trucks and carries them laterally; the second places the wheels on the rails. It is immaterial whether trains be pulled ahead or backed up, the frogs then decided carries the result is the same. They are complete, self-containing car and locomotive replacers. These Replacers are the greatest time savers in result is the same. Only are complete, self-containing car and locomotive replacers. These Replacers are the greatest time savers in reallway service. Dimensions fully developed by the most severe practical and theoretical traits, and found to be perfect. These frogs will replace any rolling stock in about one-half of the time consumed by other devices. This cut illustrates a pair of wheels upon a pair of our frogs where the wheels must slide to their proper place on the rails whether under a car or engine. These frogs are in use on more than any other device in use for rerailing any

# What Practical Railroad Men Say of Them.

B. E. Tilden Co.

Gentlemen-I have your favor and beg to say that the Tilden Improved Wrecking Frogs is all that could be desired for the purpose of replacing engines and cars. I have had occasion to take charge of wrecks personally, where I found the frogs of great service in replacing engines and cars. I do not see how they could be improved upon in any way.
M. F. BONZANO, Gen'l Sup't Phila. & Reading R. R. Co.,

Philadelphia, Pa.

B. E. Tilden Co.

Gentlemen - I have put your Improved Wrecking Frogs to the severest test and they have given the best satisfaction in every case. For replacing derailed cars or engines they are the best I have ever used.

C. W. COLEMAN, Gen'l Despatcher,
N. Y. C. & H. R. R. R., West Albany, N. Y.

B. E. Tllden Co. Green Bay, Wis.
Gentlemen—Would respectfully call your attention to the fact that we have your Car and Locomotive Replacing Frogs in our wrecking outfits and can most honestly state that they are far superior to any other wrecking frog used on any railroad in this vicinity, and that any railroad company would save time and expense by having them placed in cabooses, engines and baggage cars. Would add that they are all, if not more, than you represent them to be.

Yours truly, W. B. WOOLFORD, Trainmaster, C. M. & St. P. Ry.

B. E. Tilden Co.

Gentlemen-The Rerailing Frogs you sent us are giving excellent satisfaction. We have had occasion to use them under derailed locomotives and several cars, and they have done the work much quicker and easier than the old frogs, and not going to the blacksmith's shop for repairs, as with the old, and I consider them far ahead of anything we have ever used for replacing derailed engines and cars. E. RICH ARDSON, M. M., P. S. & L. E. R. R., Greenville, Pa.

Gentlemen--As to the working of your Replacing Frogs and the tests to which I have put them, I will say I have thoroughly tried them with cars and engines, in the yard and on the road, and they have never failed to do all that you claimed for them. I consider them by far the best wrecking frogs I have ever seen or used.

R. H. BRIGGS, M. M., K. C. M. & B. R. R., Memphis, Tenn.

B. E. Tilden Co

We have the Tilden Replacing Frogs in our tool cars and in use generally as a standard. They give first-class satisfaction.

AVERY TURNER, Sup't A. T. & S. F. R. R., Newton, Kas.

Gentlemen-Replying to your favor I beg to say that your Replacing Frogs are the best that ever came under my notice. They give ire satisfaction.

J. J. CASEY, Ass't Supt. Machinery, I. C. R. R., Chicago, Ill. us entire satisfaction.

B. E. Tilden Co. SOUTH CHICAGO, ILL.

Gentlemen—After an experience of eighteen years in train service, I do not hesitate to pronounce your make of Replacing Frogs by far the best frogs I have ever used, both for efficiency and being easy to handle. M. M. RICHEY, Sup't Calumet & Blue Island Ry.

B. E. Tilden Co.
Gentlemen—We have used your Wrecking Frogs for the last three years and they have given satisfaction in every instance.

H. N. MILLER, Supervisor Pa. R. R. Co. B. E. Tilden Co.

Gents—Yours received and am glad to hear from you. In reply would say I have your Replacing Frogs, and would not be without them. They are first-class in putting on both cars and engines.

C. S. YOUNG, Supervisor Penna. R. R. Co., Jamesburg, N. J.

B. E. 7 Gent an eng by usir clear in Replac cars or

B. E. 7 Dear and ha We th engine engine your re frog th who ki

F. J. B. E. Gent the "7 tion.

B. E. 7 Gent are giv be with

B. F. 7 Gent sent us to any of the

B. E. Gent the be perfect

Gent they a them: severe loaded J. R. H B. E. Gent

replaci track, that we and for B. E.

Dear must s them b laborer several

PE

hem.

the Tilden for the purion to take f great serev could be

g R. R. Co., lelphia, Pa.

rogs to the every case. I have ever patcher, bany, N. Y. BAY, Wis. rogs in our hey are far oad in this

esent them St. P. Ry.

and expense ggage cars.

ng excellent erailed locouch quicker mith's shop ead of anynd cars. enville, Pa.

gs and the ughly tried l, and they I consider sed. phis, Tenn.

and in use ewton, Kas.

our Replac-They give

Chicago, Ill. AGO, ILL. ain service, rogs by far being easy sland Ry.

PORT, PA. e last three

. R. R. Co.

i. In reply be without engines. sburg, N. J. B. E. Tilden Co.

DANBURY, CONN. Gentlemen-Soon after receiving the Replacers ordered from you an engine and ten freight cars were derailed at South Norwalk, and by using two pairs of Replacers, everything was on the track and clear in 45 minutes after the arrival of the wrecker. I consider your Replacers the best device I have ever seen for replacing derailed cars or locomotives.

Very truly yours,

F. C. PAYNE, Supt. N. Y., N H. & H. R. R. R.

B. E. Tilden Co.

Dear Sirs—We are using your Replacing Frogs on this division, Dear Sits—We are using your Replacing Frogs on this division, and have tested them several times in replacing engines and cars. We think there are no replacing frogs equal to them. We have had engines square across the track, and have turned and replaced the engine on the track in one and one-half length of the engine with your replacing frogs, which cannot be done with any other replacing frog that I have seen. Your replacing frogs in the hands of men who know how to use them will recommend themselves. Yours truly,

F. J. CULLENHIVE, Trainmaster, Chicago Div. C. B. & Q. R. R.

B. E. Tilden Co. Gentlemen—Some time ago our wrecking cars were furnished with the "Tilden Wrecking Frogs." They have given perfect satisfac-tion. Our wrecking foremen say they are the best they ever used. Yours truly.

JAMES GEDDES, Sup't L. & N. R. R., Nashville, Tenn.

B. E. Tilden Co.
Gentlemen-The Wrecking Frogs purchased of you some time ago are giving entire satisfaction, and in my opinion no railroad should be without them.
C. H. WARBURTON, M. M., C. L. & W. R. R., Lorain, O.

B. F. Tilden Co.

Gentlemen—We have thoroughly tested your Replacing Frogs sent us some time ago. They have proven themselves much superior to anything heretofore used by us. I consider them the best thing of the kind in use, and am highly pleased with them.

Yours respectfully,

E. M. SPENCER, Gen'l Y'd Master, L. N. A. & C. R'y.

B. E. Tilden Co. MONTGOMERY, ALA. Gentlemen-The Tilden Locomotive and Car Replacing Frogs are the best device for the purpose I have ever seen. They have given perfect satisfaction. I would not like to be without them, JAS. E. WORSWICK, Master Mechanic A. & W. P. R. R.

Gentlemen—I must say in regard to your Wrecking Frogs that they are all that you claim for them in the way of merit. I think that they are the best replacers that I have ever seen. We have them in six of our wrecking outfits. We have tried them under severe tests, such as putting on mogul and consolidated engines and loaded cars, and always found that they work satisfactory. J. R. HOFF, Foreman Car Repairs, Mo. Pacific R'y Co., DeSoto, Mo.

B. E. Tilden Co.

Gentlemen—We have used your Frogs under all conditions that any replacing frog could be used in replacing both cars and engine on track, and also have used them at different times in slewing trucks that were askew and not in line-8 to 10 inches away from the rail—and found they did all you claim for them in both cases.

Yours truly, IRA A. McCORMACK.

Train Master, N. Y. C. & H. R. R. R.

B. E. Tilden Co. Dear Sirs—Regarding the working of your Wrecking Frogs, I must say that they work satisfactory in every respect, and I like them better than any others. They are simple and any common laborer can place them. I have replaced a 50 ton ten wheeler and several light engines with them, and they work very nicely.

PETER H. PECK, M. M., C. & W. Ind., R. R. and the Belt R'y.

Co. of Chicago, Chicago, Ill.

E. Tilden Co.

St. Louis, Mo.
Gentlemen –I have several times had occasion to put your Wreck-B. E. Tilden Co.

ing Frogs to the severest possible tests and each time found them to do all that is claimed for them. They are especially useful in replacing derailed locomotives.

J. B. KENDALL, G. Y. M., Mo. Pacific Ry.

WHITE PLAINS, N. Y. B. E, Tilden Co.

Gentlemen-In regard to the Wrecking Frogs ordered of you would say that I consider them the simplest and best replacers that have ever been used on our wrecking trains. We have had occasion to use them for replacing locomotive and passenger cars and they have always worked with ease.

C. L. ROSSITER, Sup't N. Y. C. & H. R. R. R.

B. E. Tilden Co. Gentlemen—We think your replacers the best that are made. Yours truly, J. R. RENIFF, M. C. B., Lake Shore & Michigan Southern Ry., Norwalk, O.

B. E. Tilden Co. Gentlemen-As to the service of your Wrecking Frogs; we have used them extensively for the last five or six years, and I have always found them to be very efficient and the best frogs of the kind I have ever used.

Yours truly,

Chicago, Burlington & Quincy R. R., Galesburg, Ill.

B. E. Tilden Co

Gentlemen-All of our locomotive and wrecking cars are equipped with your car replacers. They give perfect satisfaction, and we consider them the very best in use.

Yours very truly, J. S. TURNER, Supt. M. P., West Virginia Central & Pittsburgh Ry., Elkins, W. Va.

B. E. Tilden Co Gentlemen-We have several pair of your Car and Locomotive

Replacing Frogs in service on this division, and they give excellent satisfaction in every respect. Yours truly,

J. W. KING, Supt. Lehigh Valley R. R., Sayre, Pa.

B. E. Tilden Co.
Gentlemen—Your Replacers are in use by us, and am glad to say

they give entire satisfaction. Yours truly,
W T WEST, Trainmaster, Southern Ry., Richmond, Va.

B. E. Tilden Co. SOUTH MCALLISTER, I. T., March 28th, 1895.
Gentlemen—Yours of March 26th, asking for our opinion on your Car Replacers, has been received, and in answer would say that I do not see how anything better could be gotten up for the purpose of replacing cars and engines on track. I have pulled en eight cars and a part of an engine at one setting of the frogs.
Yours truly, JAS. CUNNINGHAM, M. M.

Choctaw, Oklahoma & Gulf R. R. CITY OF MEXICO, MEXICO, Feb. 22nd, 1895. B. E. Tilden Co. Gentlemen—We consider your Replacers by far the best frogs ever put on the market, and use them exclusively on this road.
Yours truly, F. W. JOHNSTONE, Supt. M. P & M.,
Mexican Central Ry.

B. E. Tilden Co.

Dear Sirs—We have your make of Replacing Frogs in use. As regards their utility, they are all you claim for them, and after three regards their utility, they are all you claim for them, and after three regards their utility, they are all you claim for them. years' experience with them on this road we have discarded every Yours truly, HENRY E. WALKER, Loco. Supt. other type.

Southern Railway, Puebla, Mex

We have on file several hundred similar testimonials from railroad

men of many years' experience in operating departments.

After thorough trial any practical railroad operator will readily appreciate these frogs as being the strongest, simplest, cheapest, most convenient and only practical invention for the purpose of replacing derailed cars and locomotives. The track is not interfered with, and being constructed on scientific principles, the frogs never fail to replace the wheels upon the rails, without any failure or cost for repairs.

### Partial 1

Alabama ! Atlantic 8 Atlantic C Allegheny Atchison, Atlantic & Baldwin I Baltimore Baltimore Bay of Qu Beech Cre Belt Rail Birmingh Boston an Boston & Brunswic Buffalo, F Burlingto Calumet e Canada A Cape Fea Central R Central R Central V Chesapea Chesapea Chicago Chicago Chicago Chicago & Chicago & Chicago & Chicago & Chicago, Chicago, Chicago, Choctaw, Cincinnat Cincinna Cincinnat Cleveland Cleveland Cleveland Columbu Concord Delaware Detroit, l Duluth, l East Ten Evansvill Fairhave Fall Broo Fitchbur Florida C Georgia I Grand R Great No Gulf, Col Hanniba Houston Illinois C

> Indiana, Internati Iowa Cer

# Partial List of Railroads Using these Wrecking Frogs.

s, Mo. Wreckthem to replaccific Ry. N. Y. of you ers that occasion nd they R. R. R. ade. B., walk, O. we have e always d I have Supt. ourg, Ill. equipped and we comotive excellent ayre, Pa. d to say ond, Va. 1, 1895. on your that I do 1. M. alf R. R. d, 1895. est frogs ad. & M., atral Ry. use. As ed every Supt. bla, Mex railroad l readily cheapest, se of renterfered

ngs never

Atlantic & Pacific Railroad.
Atlantic & Pacific Railroad.
Atlantic & Pacific Railroad.
Atlantic & Danville Ry.
Allegheny Valley Ry.
Atchison, Topeka & Santa Fe R. R.
Atlantic & Danville Ry.
Baldwin Locomotive Works.
Baltimore & Ohio Railroad.
Baltimore & Ohio Southwestern R. R.
Bay of Quinte Ry. Nav. Co.
Beech Creek Railroad.
Belt Railway of Chicago.
Birmingham, Sheffield & Tennessee River Ry.
Boston and Maine Railroad.
Boston & Albany Railroad.
Brunswick & Western Railroad.
Brunswick & Western Railroad.
Buffalo, Rochester & Pittsburgh Ry.
Burlington & Missouri River R. R. in Neb.
Calumet & Blue Island Ry.
Canada Atlantic Ry.
Caneda Atlantic Ry.
Cape Fear & Yadkin Valley Ry.
Central Railroad of Penna
Central R. R of New Jersey.
Central Vermont R. R.
Chesapeake & Ohio & South-Western R. R.
Chicago & Alton Railroad.
Chicago & Eastern Illinois R. R.
Chicago & North-Western Ry.
Chicago & Western Indiana R. R,
Chicago & Western Indiana R. R,
Chicago & Western Indiana R. R,
Chicago & Western Michigan Ry.
Chicago, Burlington & Quincy R. R.
Chicago, Burlington & Quincy R. R.
Chicago, Rock Island & Pacific Ry.
Chicago, Rock Island & Pacific Ry.
Chicago, Rock Island & Pacific Ry.
Chicanati, Hamilton & Dayton R. R.
Cincinnati, Chicago & St. Louis Ry.
Cleveland, Corain & Wheeling Ry.
Columbus, Sandusky & Hocking Ry.
Columbus, Sandu Alabama Midlland Ry. Atlantic & Pacific Railroad. Atlantic Coast Line. Illinois Central Railroad. Indiana, Illinois & Iowa Railroad. International & Great Northern R. R. Iowa Central Railway.

THERE ARE PRETENDERS WHO CLAIM TO HAVE WONDERFUL REPLACERS, BUT THEY KNOW BETTER THAN TO ACCEPT OUR CHALLENGE OR MEET US IN COMPETITIVE TEST. BEWARE OF IMITATIONS; THEY ARE INFRINGEMENTS.

Jacksonville, Tampa & Key West Ry.
Kausas City Belt Railway.
Kansas City, Fort Scott & Memphis R. R.
Kansas City, Memphis & Birmingham R. R.
Kansas City & Northwestern R. R.
Kansas City, Pittsburg & Gulf R. R.
Kansas City, Pittsburg & Gulf R. R.
Kansas City, Pittsburg & Gulf R. R.
Lakes Shore & Michigan Southern Ry.
Lake Erie & Western R. R.
Lehigh Valley Railroad.
Long Island Railroad.
Louisville & Nashville R. R.
Louisville, New Albany & Chicago Ry.
Louisville, Evansville & St. Louis Consolidated R. R.
Maine Central Railroad. Maine Central Railroad. Memphis & Charleston R. R. Mexican Central Ry. Mexican International R. R. Mexican International R. R. Mexican National R. R. Midland Railway of England. Minneapolis & St. Louis R. R. Missouri, Kansas & Texas Ry. Missouri Pacific Ry. Mobile & Ohio Railroad. Mobile & Ohio Railroad.
Nashville, Chattanooga & St. Louis Ry.
New York & New England R. R.
New York Central & Hudson River R. R.
New York, New Haven & Hartford R. R.
New York, Ontario & Western Ry.
New York, Susquehanna & Western R. R.
Norfolk & Western Railroad.
Northern Pacific Railroad.
Ohio Central Lines.
Ohio River Railroad.
Pennsylvania Company. Pennsylvania Company. Pennsylvania Railroad. Pennsylvania & North-Western R. R. Philadelphia & Reading R. R. Pittsburgh, Cincinnati, Chicago & St. Louis Ry. Panama Railroad. ranama Kalifoad.
Raleigh & Gaston R. R.
Seaboard Air Line.
Southern Railway.
St. Louis, Alton & Terre Haute R. R.
St. Louis & San Francisco Ry.
St. Louis South-western Ry St. Louis, Iron Mountain & Southern Ry, St. Louis Merchants Bridge Terminal Ry. St. Louis Merchants Bridge Terminal San Antonia & Aransas Pass Ry. Savannah, Florida & Western Ry. Seaboard & Roanoke R. R. South Carolina & Georgia R. R. Southern Pacific Co. Texas & Pacific Ry. Toledo, St. Louis & Kansas City R. R. Ulster & Delaware R. R. Ulster & Pacific Ry. Union Pacific Ry. Wabash Railroad. Western & Atlantic R. R. West Jersey Railroad. West Shore Railroad. West Virginia Central & Pittsburgh Ry Wilmington & Northern R. R. Wisconsin Central Lines.

EVERYWHERE. Please read reports of service rendered by these frogs. SATISFACTION

IN USE ON SEVERAL HUNDRED ADDITIONAL ROADS AND GIVING PERFECT

A to no trobeing What Tilde derai One positi will of If I off the to rewhee any of The justing the trope of trope of the trope of trope

enougrail, a whee intercegravi will tic limother wreck

trated

with
Th
railre
Th
dropprailm

Ple

place them

tom, direc W equa expe

quick EXC A trial has convinced the most frugal managers that no train should be run without these Replacing Frogs being a part of its equipment.

When you order new locomotives you can specify Tilden's Improved Replacing Frogs that will replace any

derailed rolling stock.

One man can carry a pair of these frogs and place in position in less time than any other device, and they will do superior service.

If left in position after use they will not throw a wheel off the rails. They only raise the wheels high enough to replace them, the power of gravity throwing the wheels onto the rails, therefore require less power than

any other replacing frogs in use.

There are no rods, pins, spikes or clamps, and no adjustments necessary more than laying in position as illustrated, and they may stand away from the rails far enough to allow flange to pass between inner frog and rail, also outer frog same distance away will clear any wheel on rails. Our improved Replacing frogs have an interchangeable wear plate, upon which the wheel flange gravitates to its place upon the rail. These Replacers will carry 150 tons without exceeding their elastic limit, and we guarantee them to be superior to all others. If economy of time is an object to you, these wrecking frogs are the ones you want, as they can be placed and derailed cars or locomotives replaced with them in less than half the time the service can be done with any other device.

These Frogs are in use on nearly all of the principal railroads in this country, also in several foreign countries.

These Wrecking Frogs will retain themselves where dropped, and save time and expense in any case of derailment.

Please observe price hereon, which is strictly bottom, therefore we are compelled to sell these goods direct.

We challenge the world to produce wrecking frogs equal to these for good service, time, convenience, expense, durability, etc., and meet us in contest for quick and sure re-railing. OPEN TO ALL. HAVE EXCELLED ALL.

## Patented in the United States, Canada and Europe.

In presenting the accompanying cut, it is hardly necessary to allude to the inefficiency, annoyance, breakages and altogether unsatisfactory character of the ordinary wrecking frogs. All trainmen are familiar with their defects, and on the other hand, know the good results often attained from a properly built mound of wood covered with some oiled splice bars, or links and pins.

These frogs are the wood splice-bars, links, etc., put into practical shape. When engines and cabooses are equipped with these replacers they are always at hand and ready for instant use. Each frog has a handle at middle inside, so that a pair of them can be carried (one in each hand) with greater convenience than any other

wrecking frogs.

Our recent Improved Replacing Frogs are about 3 feet long and 8 inches wide, made of refined metals, with chrome steel interchangeable wear plate top, or of the strongest quality of cast steel. These extra improved Replacers are adapted to any rolling stock and all T rail.

Price of our extra improved Replacing Frogs is \$18 per set, delivered free to nearest point on purchasing road, or to any road in the United States not west of the Missouri river. To roads west thereof, we prepay freight free as far as Missouri river, and for export we prepay freight to seaboard at New York or New Orleans.

There are infringing replacers, without braces, being offered for sale, but they require different size replacers to re-rail to the different height rails, and are short-

lived in heavy service, as they are only shells.

We respectfully solicit a trial order, and are confident all railroad managers throughout the country will be pleased with the service of these frogs, and be convinced that their adoption will prevent the expenditure of many times their cost in a short time. The use of these frogs, on all engines and cabooses, will largely do away with sending for wrecking trains.

One man can replace cars or helpless engines with our frogs and a pair of jacks, without any other power or assistance. Furthermore, these frogs are adapted to every variety of gauge and height of rail, replacing any derailed rolling stock with the greatest possible

economy of time.

These new wrecking frogs were invented owing to great necessity, the inventor being a practical railroad

man of over twenty years' experience.

These frogs are simple in construction, easy to handle, and positive in action, and will pay for themselves in saving of time over the use of any other replacing device.

